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# MEDICAL HISTORY

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## THE HOWARD UNIVERSITY MEDICAL DEPARTMENT IN THE FLEXNER ERA: 1910-1929

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The Howard University College of Medicine, the oldest predominantly black medical school in the United States, did not always have the financial stability that the institution has today. Known as the Howard University Medical Department in the early 20th century, it narrowly escaped insolvency and dissolution when American medicine reassessed the educational system. The events of this period describe an important chapter not only in Howard's history, but in the history of American medical education.

The early 20th century was an exciting period at Howard for several reasons. First, this era was characterized by intense introspection within the medical profession. Research advances in the late 19th century confirmed the scientific basis of medicine, and after 1900 the American Medical Association (AMA) aggressively pushed to restructure the education system. Little escaped the AMA's scrutiny. Premedical education, medical school curricula, and the quality of the physicians produced were all questioned. Guided by the European system, the AMA understood how it proposed to transform medical education and focused on implementing these ideas at Howard and elsewhere.

*Medical Education in the United States and Canada*, the 1910 study more commonly known as the Flexner Report after its author Abraham Flexner, had a profound effect at Howard during this period. The report was by no means exclusive of the concurrent reform movement, but its impact was so dramatic that it deserves independent discussion. The report criticized American medical education as a whole, including detailed assessments of

each school. It documented weaknesses at Howard and outlined costly recommendations to rectify the problems. Given the considerable momentum of the reform movement, the school was forced to acquiesce. Failure to comply risked public criticism from organized medicine, as well as financial catastrophe.

Finally, the early 20th century was noteworthy at Howard because during these years medical education burgeoned into a multimillion dollar enterprise. The AMA's proposed transformation of the entire medical education system was an expensive endeavor, but the movement was fueled by the accompanying ascent of medical philanthropy. Nine foundations alone granted medical institutions \$154 million between 1903 and 1934, almost half of the total they gave for all purposes.<sup>1</sup> It has been estimated that the aggregate of donations from private individuals even exceeded the foundations' gifts. Public sources also poured capital into medical education. State legislatures increased their support 15-fold between 1900 and 1923 alone.<sup>2</sup> Howard administrators were fully aware of these developments, but attracting a portion of this new beneficence was a challenge.

This article explores the events that occurred at Howard from 1910 to 1929, the 20 years following the publication of the Flexner Report. Designation of this period as the "Flexner Era" is purely arbitrary. The focus begins at the report's publication because it was instrumental in publicizing and accelerating a previously established reform movement. Medical education has been constantly evolving throughout the 20th century. Many of the Flexner Report's recommendations are firmly entrenched in the system, while others are long forgotten. The Flexner Era could easily encompass the 78 years that have elapsed since its release.

The 20 years described, however, cover a fascinating period in Howard's history. Like other institutions,

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Howard had to accommodate the external forces of reform and endure the financial predicaments they created. Howard administrators experienced incredible frustration, but also enjoyed prodigious successes and progress. As one of the few medical schools that trained black physicians, Howard was special. This fact gave Howard leverage in the pursuit of financial support, but it paradoxically worked to exclude Howard from the elite cadre that received the majority of philanthropic attention.

Before discussing the Flexner Report and the sequelae at Howard, one must understand the impetus that led to its publication. Opportunities in medical education were extremely diverse at the turn of the century. Uniform standards for admission to and graduation from medical school did not exist. Some institutions required a college degree for admission, whereas others accepted less than a full high school course. Opportunities and curricula in the preclinical and clinical years varied greatly. Proprietary schools were commonplace.

The AMA began to criticize the status of medical education as early as 1901, when an article in its journal attributed the "overcrowding" of the profession to a surfeit of medical school graduates. This observation and other misgivings persuaded the AMA to address the problems more formally. It assembled the Council on Medical Education (CME) in 1904, a body designated to wield "a national influence and control of medical education."<sup>3</sup>

The CME acted quickly. In 1905, it contacted all the state licensing boards and urged them to require a four-year high school course, a four-year medical school course, and a passing grade on the state examinations as criteria for licensure. After inspecting all of the 160 medical schools in 1906, the CME sent the state boards ratings of every school based on the percentage of graduates who passed the boards, the enforcement of prerequisite admission requirements, the laboratory science faculty, the laboratory and clinical facilities and instruction, and whether the school operated for profit. Percentages of graduates who passed the boards from each school were published in the AMA's journal.<sup>3</sup> During the same year, the CME requested that all medical schools require a year of college level biology, chemistry, physics, and a foreign language prior to admission.<sup>4</sup> By 1907, the CME's pressure had convinced 50 schools to require a year of college level courses prior to admission. It then stratified all the schools by creating three categories. Eighty-two schools including Howard earned the highest class A rating, 46 were labeled class B, and 32 schools were deemed class C.

The CME desired to direct medical education toward the structure of the scientifically based European system. It soon realized, however, that implementation of these reforms was an expensive proposition. The cost of new laboratory buildings, teaching hospitals, clinics and equipment, as well as the expense of hiring laboratory science faculty far exceeded the financial resources of the medical profession. Arthur Dean Bevan, Chairman of the CME, hoped that benevolent philanthropists would come to the rescue.<sup>3</sup>

Bevan commenced the quest for financial support by contacting Henry S. Pritchett, President of the Carnegie Foundation for the Advancement of Teaching (CFAT), and inviting him to review the CME's data concerning American medical schools. Bevan wanted an ostensibly objective organization like the CFAT to duplicate the CME's efforts. The CFAT could publicize the perceived deficiencies and alert potential philanthropists to the problems. Criticism by an objective body would also mitigate the potential repercussions from the medical community. Pritchett agreed to help Bevan, and he began discussing the proposed project with various educators. Among the consultants was Simon Flexner, MD, Director of the Rockefeller Institute for Medical Research. Flexner nominated his brother Abraham for director of the study.<sup>3</sup>

Abraham Flexner appeared to be the ideal candidate for the task. An educator by trade, he qualified as an objective critic. But he also had experience in the field of education. After finishing The Johns Hopkins University in two years, he founded a college preparatory school in Kentucky. He completed a year of advanced study in education at Harvard University. He had additional training in Europe, where he wrote a book titled *The American College* in 1908. In addition, when Pritchett contacted him to discuss the project, Flexner was unemployed. He accepted the offer, and the Flexner Report was born.<sup>3</sup>

Armed with the CME's data, Flexner commenced the project in 1908. Before beginning his itinerary, however, Flexner met with William H. Welch, MD, William S. Halsted, MD, Franklin P. Mall, MD, John J. Abel, MD, and William H. Mall, MD, all faculty members of The Johns Hopkins University School of Medicine. These interviews gave Flexner what he called a "tremendous advantage" because he became "intimately acquainted with a small but ideal medical school embodying in a novel way, the best features of medical education in England, France, and Germany."<sup>5</sup>

Using Johns Hopkins as his reference standard, Flexner  
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embarked on his journey. Although he denied using a fixed questionnaire, he did utilize rigid criteria during the inspections. He judged the institutions based on the entrance requirements and their enforcement; the size and training of the faculty; the income from endowment and fees for use; the qualifications and training of the preclinical instructors; the quality and adequacy of the preclinical laboratories; and the intimacy of the relationship between the medical school and its affiliated teaching hospitals.<sup>5</sup> Two years later, in June of 1910, the CFAT released the completed project, marking the beginning of the Flexner Era.

The content of the Flexner Report did not differ greatly from the recommendations the CME had been urging covertly the past few years. Flexner emphasized the importance of adequate preparation for medical training. To guarantee a solid foundation for students, he recommended a basic requirement of two years of college study with emphasis on the sciences and foreign language. Flexner stressed the role of science in medicine and the function of the physician as a scientist. To inspire students to think creatively, he advised faculty involvement in research. Faculty members were to be full-time employees of the schools because the financial incentives of general practice inevitably distracted them from their institutions. He stressed the value of close interaction between the medical school and an affiliated hospital where students gained clinical experience. He urged closure of proprietary schools because these schools too often produced ill-trained physicians. He also advised reducing the number of medical schools to 31 strategically located centers.

Individually, Flexner found that Howard, like all other schools, failed to equal the standard set at Johns Hopkins. He noted that Howard lacked an organized museum for pathologic specimens. Freedmen's Hospital, the teaching facility affiliated with Howard, needed a ward exclusively for treatment of infectious diseases. Flexner did, however, acknowledge some of the positive attributes at Howard. He found Freedmen's to be "new, thoroughly modern, and adequate." In the general comments concerning medical education in Washington, DC, Flexner declared that "sound policy—educational as well as philanthropic" recommended a more intimate relationship between Freedmen's and the Medical Department. He concluded that Howard, the only medical school in the city worthy of survival, had a "distinct mission—that of training the Negro physician."<sup>6</sup>

Flexner explained his prophecy in the report's disparaging 14th chapter, titled "The Medical Education of

the Negro." He declared that "medical care of the Negro race will never be wholly left to Negro physicians." He believed that black physicians were essential in American society for two reasons. First, black physicians were instrumental to "mental and moral improvement" of their race. Also, black physicians and nurses were necessary to promote public health and instruct principles of hygiene in their community. Blacks spread pestilence not only among their own population, but also to whites. Flexner recognized that blacks were a "permanent factor in the nation," and thus they deserved the "tremendous importance" that belonged to a "potential source of infection and contagion."<sup>6</sup>

Howard's "mission" was unequivocal. The need for quality black physicians outweighed manpower in importance because "an essentially untrained Negro" practicing medicine was "dangerous." Therefore, he endorsed the two black schools he considered adequate, Howard and Meharry in Nashville. The five other black schools did not merit survival. Howard and Meharry were to provide an education stressing principles of hygiene instead of academic medicine and research. The "duty" of their graduates was to "humbly and devotedly" abandon the urban centers and settle in rural areas where their services were needed. For this reason, Howard was "worth developing." He recommended increased support for the school and urged the government to sponsor expeditious improvement.<sup>6</sup>

Flexner's appraisal of Howard hinged on the fact that Howard was classified as a "colored" school. Howard's racial composition, however, was more complex. Although the student body at Howard was predominantly black, the school had exercised an open admissions policy from its inception. The founders of the university had envisioned an institution of higher learning that instructed students "without respect of race or sex."<sup>7</sup> The original seal of the University reflected this ideal. It portrayed five individuals—a white man, a black man, an Oriental, and two native Americans—around a globe. The motto "Equal Rights and Knowledge for All" adorned the seal. Indeed, students of all races had enrolled at Howard since the school was founded in 1867.<sup>8</sup>

Howard was also integrated at the administrative level from the outset. The initial seven-member Medical Department faculty was comprised of two blacks and five whites.<sup>8</sup> When the Flexner Report was published in 1910, both the President of the University and the Dean of the Medical Department were white. The AMA was segregated at the time, so a white Dean permitted representa-

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tion of the school at national meetings. The medical school faculty was also fully integrated during the Flexner Era.

Howard's slogan applied equally to women. Flexner devoted a chapter to medical education of women, in which he noted that virtually all schools offered positions to women. In 1910, the practice of admitting women on a national level was a recent development. As the first school to admit women in Washington, Howard had been training female physicians for over 40 years. Over 100 women enrolled in Howard between 1869 and 1900, and 48 graduated. As much as 24% of the student body in the 1870s were women.<sup>9</sup> For almost 40 years, most of the female physicians in Washington were graduates of Howard because no other institutions admitted women.<sup>8</sup> Women also gained faculty positions. In 1872, the AMA barred the Howard delegation from its national meeting and threatened Howard's status in the organization because the school had hired a woman to teach ophthalmology and treat eye and ear infections at Freedmen's. Howard had violated the AMA ethics code prohibiting female instructors.<sup>9</sup>

Thus, Flexner simplified Howard's complex historical origins—a crucial point because of the enormous attention the report received. Unfortunately, the publicity Howard received failed to portray accurately the ideals of the University's founders. The misrepresentation extended beyond Howard's racial history. The “distinct mission” Flexner lucidly defined differed greatly from that of the founders, who planned a “national institution, embracing all classes of the youth of the land . . . to be ultimately of the highest grade.”<sup>7</sup> Although the report may have introduced Howard to a segment of the public unaware of its existence,<sup>4</sup> it presented an ideology inferior to the school's actual policy.

By current standards such an egregious discrepancy would have evoked outrage. However, the report failed to provoke a public response from Howard. An official rebuttal was absent from the largest Washington dailies, *The Washington Post* and the *Washington Star*, as well as the two principal black newspapers, *The Afro-American* and *The Washington Bee*.

One reason the report spurred little controversy at Howard was because its President, Wilbur P. Thirkield, shared some of Flexner's views. “The Training of Ministers and Physicians for the Negro Race,” an address Thirkield delivered in 1909, illustrates this point. He expressed concern about the dearth of black physicians because they were the “most effective and permanent force available for the uplift of the family and the moral-

ization of the social life of the Negro.” He argued that failure to elevate blacks “physically, mentally, [and] morally” would “pull down our civilization.”<sup>10</sup>

The report evaded criticism from within the black community. Black physicians were fully cognizant of the pressure of medical reform, as well as the poor evaluations the CME had given all the black medical schools except Howard and Meharry. It has been suggested that the National Medical Association, the equivalent of the AMA for blacks, avoided a public response to avoid further embarrassment.<sup>4</sup> John A. Kenney, Sr., MD, an esteemed black physician, cited only the positive comments from the report in his 1912 book, *The Negro in Medicine*. Kenney observed that the “judgement of leading physicians and careful scientists” had recognized Howard's offering of an “opportunity . . . for the physical, social, and moral betterment of the Negro race.” Modernization of Howard facilities and laboratories, he added, would “do more to cleanse and elevate a race of millions and safeguard the twenty millions of white people among whom they live than . . . any other institution in the nation.”<sup>11</sup>

Flexner's assessment of Howard also provides a compelling explanation why Howard did not criticize the report. Compared with many schools, Flexner's evaluation was relatively positive. Howard did not receive the accolades bestowed on Johns Hopkins, but the commentary was innocuous in comparison with the disparaging remarks about other schools. Flexner labeled the Willamette University Medical Department in Salem, Oregon, an “utterly hopeless affair,” and nine of the 13 schools in Missouri were dismissed as “utterly wretched.” In his remarks on Kansas Medical College, he noted that the “incredibly filthy” dissecting room, which simultaneously served as a chicken yard, contained a “single, badly hacked cadaver.”<sup>6</sup> Indeed Howard's evaluation was misguided, but administrators realized that the damage could have been worse. In a letter Thirkield wrote to Pritchett of the CFAT, he stated that Howard was pleased with the “favorable representation” the school had received.<sup>12</sup>

Finally, Howard may have refrained from responding to the report because recalcitrance would have been futile. Howard administrators had endured mounting pressure for reform from the CME for several years prior to the report's publication. Most of the recommendations were familiar to the faculty, except they were now reinforced by an educational expert under the auspices of a reputable, national organization. Eloquent arguments validated the impetus for change, and a plethora of data documented perceived deficiencies in the system. Reti-

cence signified acquiescence that the medical education reform movement could not be resisted.

Although the recommendations of the report were not new to Howard administrators, their publication changed how administrators presented the school to the public. An example is Howard's catalog description of Freedmen's Hospital. In the catalog published prior to the report, discussion of the hospital contained its location, a brief history, and statistical information concerning the number of beds, the annual patient load, and the number of surgical procedures performed. Two sentences described the connection between the medical school and the hospital:

Seniors and juniors are required to attend the clinics, and their attendance must be certified by the clinicians before the students enter on their final examination. They will also be expected to act as clinical clerks and assist in the pathological laboratory.<sup>13</sup>

Although the text mentioned that clinical instruction was part of the education, the rendering failed to convey the significance of this aspect of the program.

The catalog published following the report provided a more comprehensive assessment of Freedmen's role:

The hospital has the great advantage of being instituted primarily for teaching purposes, as all who are admitted are utilized freely for instruction . . . There are few hospitals where this is carried so far, the only restriction being the possibility of doing the patient harm . . . The faculty practically makes up the staff of the hospital. They are teachers who attend regularly on the patients . . . and give clinical instruction . . . Clinics are held every day during the year and examinations are made, prescriptions given, and surgical procedures performed in the presence of the classes or sections thereof. The patients are assigned to medical students who take histories of the cases, make the physical examinations, the diagnosis and prognosis and suggest the line of treatment or operative procedure thought necessary . . . Stress is laid upon the value of ward and bedside instruction. The character of the hospital is such that this mode of instruction can be carried out more fully and systematically than in many other hospitals available for teaching purposes . . . the practical hospital work the students of this department are able to do is not yet given in many medical schools.<sup>14</sup>

The text also described in greater detail the responsibilities of and opportunities for students on particular services as well as the facilities available.

The report's endorsement of an intimate medical school-teaching hospital relationship undoubtedly influenced the appearance of the more detailed description of

Freedmen's function. Flexner declared that the government had done Howard an "incalculable great service" by building Freedmen's and recommended an even closer relationship.<sup>6</sup> The report recognized an asset that separated Howard from many other schools, which allowed the more confident discussion. Howard, however, had recognized the value of Freedmen's long before 1910 and had worked several years to sustain a close relationship between the hospital and the Medical Department.

At its inception, Howard's founders strove to integrate experience at a teaching hospital into the medical curriculum. Predating the medical school, a temporary predecessor of Freedmen's was constructed by the Freedmen's Bureau in 1862 to care for the rising influx of impoverished blacks in Washington. The continuing problem of health care for the migrant blacks called for a superior solution, so in 1869 the Bureau erected the permanent Freedmen's, a 300-bed capacity facility on the grounds of the recently established Howard University. The initial charter of the Medical Department called for a general hospital, with physicians and surgeons who composed the faculty of the school. Anticipating the imminent dissolution of the Bureau, Howard labored to ensure permanence of the hospital. The patient population was expanded from destitute blacks exclusively to include patients of all races from Washington, Maryland, and Virginia.<sup>15</sup> To reinforce the relationship, the hospital adopted a policy of appointing residents from Howard's graduating class. Howard valued Freedmen's and considered it a vital component of its education. In 1908, the Board of Trustees honored the former surgeon-in-chief of Freedmen's, Charles B. Purvis, MD, because he brought the hospital into "closest alignment" with the medical school during his tenure.<sup>16</sup>

The Flexner Report also persuaded Howard to establish more stringent admission requirements, although the school had repelled pressure from the CME to make such changes in the recent past. This was a difficult step for Howard administrators to take, because they understood the sequelae. Raising admission standards inevitably would decrease enrollment. Like many other medical schools, Howard derived virtually all its income from student fees. Few blacks attended college before medical school, few black colleges offered the advanced courses, and virtually no white colleges accepted black students.<sup>4</sup> Decreased enrollment meant reduced revenue. Administrators recognized the precarious position reform would create, but the report forced them to accept the challenge.

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Howard had decided to raise the admission requirements before the Report was officially released, which illustrates that administrators foresaw the report's eventual influence. After visiting Howard in January of 1910, Flexner sent the school a summary of his impressions. In February, Thirkield wrote Pritchett because he wanted Flexner to amend the description of Howard's admission requirements. Howard had just voted to require a year of college courses in science and foreign language starting with the 1910-1911 session.<sup>12</sup> By 1914, Howard's requirements concurred with the recommendations of the Flexner Report. A special notice in the school catalog warned that students entering in 1914 needed two years of college preparation.<sup>17</sup> This requirements persisted throughout the Flexner Era.

As Howard administrators foresaw the impact of the report, they also predicted the impending financial predicament reform would create. One month before the report was published, Dean of the Medical Department Edward A. Balloch, MD, submitted his annual report to President Thirkield. Balloch and the faculty commended the new admission requirements, but they were concerned about the future impact on the school's already nebulous economic status. The school relied essentially on student fees and a small annual federal grant for income, which scarcely covered expenses. Secretary-Treasurer William C. McNeill, MD, was already making great sacrifices to avoid annual deficits by underpaying the faculty and scrupulously minimizing educational expenditures. At times, the school was forced to supplement income with student collections. Balloch contended that it was a disservice to the faculty to pay them so poorly and to furnish them with inadequate equipment and supplies. Expecting a decline in admissions, Balloch declared that the school could no longer depend so heavily on student fees for income. He concluded that an endowment of \$500,000 was necessary for self-sufficiency, and its procurement deserved "precedence over everything else."<sup>14</sup>

Balloch's suspicions were correct. Table 1 illustrates how the elevated admission standards affected student enrollment. Before admission requirements were raised, the student body exceeded 200. Within five years, the enrollment had plunged over 50% to 93. Over four years the number of graduates decreased precipitously from a peak of 36 to a low of 12 in 1916. As Table 2 demonstrates, the drop in enrollment consequently decreased the income from student fees. Income from tuition dropped from \$33,064 in 1910 to \$22,743 in 1916. Table 2 also illustrates Howard's dependence on student fees—

**TABLE 1. ENROLLMENT AND GRADUATES OF THE HOWARD UNIVERSITY MEDICAL DEPARTMENT: 1910-1929\***

Session	Enrollment	Graduates
1909-10	210	28
1910-11	192	28
1911-12	180	36
1912-13	121	21
1913-14	110	32
1914-15	93	20
1915-16	98	12
1916-17	111	13
1917-18	114	24
1918-19	108	19
1919-20	113	27
1920-21	131	27
1921-22	198	22
1922-23	222	27
1923-24	237	27
1924-25	247	72
1925-26	226	55
1926-27	222	45
1927-28	235	52
1928-29	235	42

\* Excludes dental and pharmacy students.

From the *Report of the President of Howard University to the Secretary of the Interior*, Washington, DC, Howard University, years 1910-1929.

over 99% of the 1910 income was derived from fees. The percentage of total income derived from fees also declined because the University had begun covering the department's deficits. The federal government appropriated funds annually to the Medical Department. However, these funds supported maintenance and repair of plant and equipment and were inaccessible for yearly expenses.

By necessity, financial concerns engulfed Howard's attention during the Flexner Era. The obsession transcended the struggle for economic independence because Howard had to honor the persistent pressure of the reform movement. Flexner had recommended full-time faculty members as well as modernized buildings, laboratories, and equipment. Implementation of these suggestions required extensive financing. Failure to adopt the improvements would have jeopardized Howard's rating as a class A school.

Because of Howard's meager sources of income, the school turned to outside sources for help. The CFAT was partially responsible for the initiation of medical reform, so Howard solicited it first for financial assistance. Three months after the report's release, President Thirkield unsuccessfully asked Andrew Carnegie for support.

TABLE 2. MEDICAL DEPARTMENT INCOME: TOTAL AND FROM FEES 1910-1929\*

Year	Total Income	Income from Student Fees	Percent of Total Income from Fees
1910	33,172	33,064	99.9
1911	36,546	31,796	87.0
1912	36,892	32,309	87.6
1913	35,841	27,507	76.7
1914	35,295	27,318	77.4
1915	38,059	30,599	80.4
1916	40,926	22,743	55.6
1917	43,507	33,143	76.2
1918	39,563	31,703	80.1
1919	41,747	33,769	80.7
1920	60,835	48,982	80.5
1921	82,796	59,107	71.4
1922	101,234	75,677	74.8
1923	110,923	75,081	67.7
1924	100,453	65,079	64.8
1925	90,381	60,855	67.3
1926	93,070	60,653	65.2
1927	104,796	70,945	67.7
1928	242,242	73,776	30.5
1929	111,433	64,730	58.1

\* Income reported in dollars.

From the *Howard University Financial Report*, Washington, DC, Howard University, years 1910-1918 and 1922-1929; and *Report of the President of Howard University to the Secretary of the Interior*, Washington DC, Howard University, years 1919-1921.

Thirkield persisted. In May of 1911, he sent Carnegie a comprehensive application for \$200,000 to finance a new medical school building. The proposal explained that the school could not afford to hire full-time faculty members, build new buildings, or implement the other suggestions of the Flexner Report. In addition, Howard had the challenge of providing a modern medical education with a budget derived essentially from student tuition. Howard had reached a "crisis in its affairs." Thirkield reminded Carnegie of the message the Flexner Report purveyed. Howard graduates promoted preventive medicine and sanitation, which worked to protect all races from disease. Appended were endorsements of the application from luminaries including United States President William Howard Taft, Welch of Johns Hopkins, and Pritchett of the CFAT. The effort proved fruitless; the application and future ones were rejected.<sup>4</sup>

Garnering financial assistance from Carnegie was a formidable challenge because the steel magnate was disinclined to finance medical education. Carnegie viewed support of black medical schools as a perpetual endeavor due to their Herculean needs and their modicum of benefactors.<sup>4</sup> Support of the medical profession also violated Carnegie's principles. Carnegie gleaned from the Flexner Report that medical education

was a business, and he refused to endow "any other man's business."<sup>2</sup>

Howard attracted little more assistance from the government. When President William Howard Taft declared that Howard University was an "obligation of the Government of the US" in 1909, it appeared Howard had secured a commitment for augmented financial assistance.<sup>18</sup> The Medical Department learned, however, that Taft's statement was not a harbinger of increased support. Howard already depended on the government; both the University and the Medical Department received annual appropriations. Because the government engineered the founding of the University, Howard's President still submitted an annual report describing its activities to the Secretary of the Interior.

The President's Report altered its focus after release of the Flexner Report, which reflected the school's precarious financial condition. The medical school section in the 1909 edition was purely descriptive, containing a brief history of the school, the courses offered, and a sentence describing Freedmen's Hospital.<sup>19</sup> Flexner's findings dictated the content of the 1910 submission, which stressed Howard's importance and needs. Thirkield discussed the problem of tuberculosis, which could only be controlled by "thoroughly trained physi-

**TABLE 3. FEDERAL APPROPRIATIONS TO HOWARD UNIVERSITY  
AND THE MEDICAL DEPARTMENT: 1910-1929\***

Year	Appropriations to Howard University	Appropriations to the Medical Department
1910	144,700	5,000
1911	112,240	10,000
1912	92,200	10,000
1913	101,000	7,000
1914	101,000	7,000
1915	101,000	7,000
1916	101,000	7,000
1917	101,000	6,955
1918	117,938	7,000
1919	121,938	7,000
1920	243,000	7,000
1921	280,000	7,000
1922	190,000	8,000
1923	232,000	8,000
1924	365,000	9,000
1925	591,000†	379,000†
1926	218,000	9,000
1927	368,000	9,000
1928	580,000	7,229
1929	600,006	7,000

\* Appropriations in dollars.

† Includes \$370,000 for the new medical school building.

From Logan R: *Howard University the First Hundred Years*. New York, New York University Press, 1969; *Howard University Financial Report*. Washington, DC, Howard University, years 1910-1918 and 1922-1929; and *Report of the President of Howard University to the Secretary of the Interior*. Washington, DC, Howard University, years 1919-1921.

cians." The disease, a menace to all races, threatened the "health and vitality of the nation."<sup>20</sup> He also included verbatim the Flexner Report summary of Howard, including the general comments that advocated increased federal support. The 1911 President's Report contained a more comprehensive plea, which included excerpts from the Flexner Report and a lengthy quote from Booker T. Washington reiterating Howard's importance. Now Howard specifically needed "modern buildings with up-to-date equipment, with research laboratories, and other facilities."<sup>21</sup> The next three Presidents, Stephen M. Newman, J. Stanley Durkee, and Mordecai Johnson used their reports to outline deficiencies in the Medical Department, especially the endowment. The President's Report had changed from a summary of activities to a formal application for support.

Despite the Howard administrators' pleas and the Medical Department's worsening financial health, the federal government failed to help. Table 3 demonstrates that the federal government's contributions to the Medical Department remained essentially constant during the Flexner Era. Excluding 1925, the federal grants to the Medical Department never exceeded \$10,000, while

general appropriations to the University almost quadrupled. Yet annual grants to Howard became written into the law during this period. All Howard's federal support had been through a tenuous policy which lacked legislative authorization. In 1924, Representative Louis C. Cramton of Michigan introduced a controversial bill to legalize the annual grants, which passed four years later.<sup>16</sup> Debating in support of the bill, one Representative used Flexnerian arguments. He cited not only the rare opportunities Freedmen's Hospital offered black students, but also the importance of black physicians to the health of all races.<sup>22</sup> Despite the Medical Department's role in the passage of the bill, federal donations to the Medical Department ironically decreased slightly the following year.

The sole federal response was a 1925 conditional grant of \$370,000 to erect a new medical school building. Even with yearly documentation of Howard's plight, it was the chronic dearth of black physicians that provided the impetus for the grant rather than the conditions at Howard. Congress observed that the white physician per capita ratio was 1:533, while the ratio for their black

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4. Short-term treatment of **active, benign gastric ulcer**. Most patients heal within six weeks and the usefulness of further treatment has not been demonstrated.
5. Treatment of **gastroesophageal reflux disease (GERD)**. Symptomatic relief commonly occurs within one or two weeks after starting therapy. Therapy for longer than six weeks has not been studied.

In active duodenal ulcer, active, benign gastric ulcer, hypersecretory states, and GERD, concomitant antacids should be given as needed for relief of pain.

**CONTRAINDICATIONS:** ZANTAC® is contraindicated for patients known to have hypersensitivity to the drug.

**PRECAUTIONS:** General: 1. Symptomatic response to ZANTAC® therapy does not preclude the presence of gastric malignancy.

2. Since ZANTAC is excreted primarily by the kidney, dosage should be adjusted in patients with impaired renal function (see DOSAGE AND ADMINISTRATION). Caution should be observed in patients with hepatic dysfunction since ZANTAC is metabolized in the liver.

**Laboratory Tests:** False-positive tests for urine protein with Multistix® may occur during ZANTAC therapy, and therefore testing with sulfosalicylic acid is recommended.

**Drug Interactions:** Although ZANTAC has been reported to bind weakly to cytochrome P-450 in vitro, recommended doses of the drug do not inhibit the action of the cytochrome P-450-linked oxygenase enzymes in the liver. However, there have been isolated reports of drug interactions that suggest that ZANTAC may affect the bioavailability of certain drugs by some mechanism as yet unidentified (eg, a pH-dependent effect on absorption or a change in volume of distribution).

**Carcinogenesis, Mutagenesis, Impairment of Fertility:** There was no indication of tumorigenic or carcinogenic effects in lifespan studies in mice and rats at doses up to 2,000 mg/kg/day.

Ranitidine was not mutagenic in standard bacterial tests (*Salmonella*, *Escherichia coli*) for mutagenicity at concentrations up to the maximum recommended for these assays.

In a dominant lethal assay, a single oral dose of 1,000 mg/kg to male rats was without effect on the outcome of two matings per week for the next nine weeks.

**Pregnancy: Teratogenic Effects: Pregnancy Category B:** Reproduction studies have been performed in rats and rabbits at doses up to 160 times the human dose and have revealed no evidence of impaired fertility or harm to the fetus due to ZANTAC. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

**Nursing Mothers:** ZANTAC is secreted in human milk. Caution should be exercised when ZANTAC is administered to a nursing mother.

**Pediatric Use:** Safety and effectiveness in children have not been established.

**Use in Elderly Patients:** Ulcer healing rates in elderly patients (65 to 82 years of age) were no different from those in younger age groups. The incidence rates for adverse events and laboratory abnormalities were also not different from those seen in other age groups.

**ADVERSE REACTIONS:** The following have been reported as events in clinical trials or in the routine management of patients treated with ZANTAC®. The relationship to ZANTAC therapy has been unclear in many cases. Headache, sometimes severe, seems to be related to ZANTAC administration.

**Central Nervous System:** Rarely, malaise, dizziness, somnolence, insomnia, and vertigo. Rare cases of reversible mental confusion, agitation, depression, and hallucinations have been reported, predominantly in severely ill elderly patients. Rare cases of reversible blurred vision suggestive of a change in accommodation have been reported.

**Cardiovascular:** Rare reports of tachycardia, bradycardia, and premature ventricular beats.

**Gastrointestinal:** Constipation, diarrhea, nausea/vomiting, and abdominal discomfort/pain.

**Hepatic:** In normal volunteers, SGPT values were increased to at least twice the pretreatment levels in 6 of 12 subjects receiving 100 mg qid IV for seven days, and in 4 of 24 subjects receiving 50 mg qid IV for five days. With oral administration there have been occasional reports of reversible hepatitis, hepatocellular or hepatocanalicular or mixed, with or without jaundice.

**Musculoskeletal:** Rare reports of arthralgias.

**Hematologic:** Reversible blood count changes (leukopenia, granulocytopenia, thrombocytopenia) have occurred in a few patients. Rare cases of agranulocytosis or of pancytopenia, sometimes with marrow hypoplasia, have been reported.

**Endocrine:** Controlled studies in animals and man have shown no stimulation of any pituitary hormone by ZANTAC and no antiandrogenic activity, and cimetidine-induced gynecomastia and impotence in hypersecretory patients have resolved when ZANTAC has been substituted. However, occasional cases of gynecomastia, impotence, and loss of libido have been reported in male patients receiving ZANTAC, but the incidence did not differ from that in the general population.

**Integumentary:** Rash, including rare cases suggestive of mild erythema multiforme, and, rarely, alopecia.

**Other:** Rare cases of hypersensitivity reactions (eg, bronchospasm, fever, rash, eosinophilia) and small increases in serum creatinine.

**OVERDOSAGE:** Information concerning possible overdosage and its treatment appears in the full prescribing information.

**DOSAGE AND ADMINISTRATION: Active Duodenal Ulcer:** The current recommended adult oral dosage is 150 mg twice daily. An alternate dosage of 300 mg once daily at bedtime can be used for patients in whom dosing convenience is important. The advantages of one treatment regimen compared to the other in a particular patient population have yet to be demonstrated.

**Maintenance Therapy:** The current recommended adult oral dosage is 150 mg at bedtime.

**Pathological Hypersecretory Conditions (such as Zollinger-Ellison syndrome):** The current recommended adult oral dosage is 150 mg twice a day. In some patients it may be necessary to administer ZANTAC® 150-mg doses more frequently. Doses should be adjusted to individual patient needs, and should continue as long as clinically indicated. Doses up to 6 g/day have been employed in patients with severe disease.

**Benign Gastric Ulcer:** The current recommended adult oral dosage is 150 mg twice a day.

**GERD:** The current recommended adult oral dosage is 150 mg twice a day.

**Dosage Adjustment for Patients with Impaired Renal Function:** On the basis of experience with a group of subjects with severely impaired renal function treated with ZANTAC, the recommended dosage in patients with a creatinine clearance less than 50 mL/min is 150 mg every 24 hours. Should the patient's condition require, the frequency of dosing may be increased to every 12 hours or even further with caution. Hemodialysis reduces the level of circulating ranitidine. Ideally, the dosage schedule should be adjusted so that the timing of a scheduled dose coincides with the end of hemodialysis.

**HOW SUPPLIED:** ZANTAC® 300 Tablets (ranitidine hydrochloride equivalent to 300 mg of ranitidine) are yellow, capsule-shaped tablets embossed with "ZANTAC 300" on one side and "Glaxo" on the other. They are available in bottles of 30 tablets (NDC 0173-0393-40) and unit dose packs of 100 tablets (NDC 0173-0393-47).

ZANTAC® 150 Tablets (ranitidine hydrochloride equivalent to 150 mg of ranitidine) are white tablets embossed with "ZANTAC 150" on one side and "Glaxo" on the other. They are available in bottles of 60 tablets (NDC 0173-0344-42) and unit dose packs of 100 tablets (NDC 0173-0344-47).

Store between 15° and 30°C (59° and 86°F) in a dry place. Protect from light. Replace cap securely after each opening.

**Glaxo**

Glaxo Inc.  
Research Triangle Park, NC 27709

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counterparts was 1:3,194. As one of two surviving black medical schools, Howard had expressed a desire to address the problem by increasing enrollment, but it lacked the commodious facilities to accommodate an expanded student body.<sup>23</sup>

As the CFAT and the US Government proved to be unresponsive, Howard pursued the General Education Board (GEB) as a potential benefactor. The GEB, a philanthropy founded by John D. Rockefeller, Sr., controlled a large coffer of funds designated to bolster education at every level. Howard ostensibly had an ally at the wealthy foundation. Flexner, who stipulated that Howard deserved increased philanthropic support, had departed the CFAT to join the GEB in 1912.

Even with these advantages, disappointment characterized Howard's early relationship with the GEB. In April of 1912, Howard launched the campaign for GEB subsidies by submitting a letter asking for consideration of its case. Enclosed was a detailed fact sheet that repeated the arguments of Howard's "mission" as Flexner had defined it. Howard noted that obeying the recommendations had exacerbated its financial instability. But the request surpassed mere funds to ensure financial security. Howard desired support adequate to establish full-time professorships in the preclinical and clinical years—an expensive proposition. Also, Howard had abundant material to explore the "many problems of interest with the colored race that call for research work," but it could ill afford the salaries for investigators to address them. The conclusion: Howard needed an endowment of \$1 million to "do its work as it should be done." Federal support was "uncertain and insufficient," and poverty precluded University aid. Necessity forced the school to beseech "friends" like the GEB to help.<sup>24</sup>

Soon after, Secretary-Treasurer McNeill contacted the GEB to confirm the school's desperation. He explained that only through "unselfish devotion of the men who have given their time, money, and apparatus" had Howard managed to survive. The ability to cover expenses was uncertain every session. The options were to obtain aid or close the school. Urgency demanded flexibility. Howard needed to secure a grant, "conditional or otherwise."<sup>25</sup> The GEB unsympathetically answered that it was not reviewing professional school applications at the time and could not guarantee a favorable reply.<sup>26</sup>

Undaunted by the ominous response, Howard requested \$1 million in September of 1912. It acknowl-

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edged that it expected contributions toward an endowment from the black community, but "philanthropists of the wealthier race" inevitably had to supply the bulk of the sum. Through a grant, the GEB would serve as a role model and stimulate other potential benefactors.<sup>27</sup> Howard planned to restructure the school entirely, by upgrading all professors and instructors to full-time employees. The transformation would have increased the number of full-time professors from 2 to 21. The number of assistant professors would have jumped from 8 to 17, and the helpers from 3 to 8. Total compensation for instructors was projected at \$51,400, an increase of over \$30,000.<sup>28</sup> In December of 1912, Howard submitted a study comparing Howard's proposed department to the medical schools at Harvard and Johns Hopkins. Howard would have had 52 instructors on the payroll, compared with 173 at Harvard and 112 at Hopkins. The average cost of the education per student exceeded \$880 at Harvard and \$340 at Hopkins. Howard's hypothetical department would have educated students for less than \$200 each.<sup>29</sup> Both proposals were rejected.

Howard had encountered a formidable obstacle, one that would circumvent its applications for years. The GEB preferred to concentrate its efforts on the establishment of full-time clinical professors. Flexner had warned Howard that the GEB was "unlikely" to endow schools where clinical instructors earned outside income because its largesse was intended for institutions where instructors were "freely donating their services."<sup>30</sup> The GEB did not officially resolve to focus on this end until January of 1914, although its members had already manifested their bias.<sup>18</sup> Schools with the ability to accept the full-time plan unequivocally prospered. The initial efforts drew opposition from Harvard and Hopkins, which argued that hiring full-time clinical professors would have created a financial burden. By discontinuing private practice, practitioners would have sacrificed personal income and professional experience. After years of debate, acquiescence at Hopkins earned a GEB grant of \$1.5 million to initiate the plan and additional large subsidies over the next few years. Following Hopkins' lead, Duke, Iowa, McGill, Rochester, Vanderbilt, Washington University, and Yale restructured their schools and landed hefty GEB grants.<sup>1,31</sup>

At Howard, inadequate financial resources prevented the change. The efforts of Howard's underpaid professors were already "exceedingly generous," and the school could not afford the salary supplementation necessary to offset lost income from cessation of private practice.<sup>32</sup> In 1913, for example, the faculty approved a

self-imposed salary reduction of 10% to boost funds for laboratory facilities. The sacrifices of Paul Bartsch, MD, provide another example. Bartsch, a renowned member of the faculty, received only \$1,500 per annum for innumerable hours of work. Some years he received only \$150 or \$250.<sup>33</sup> Howard pursued full-time professors in the preclinical disciplines of anatomy, physiology, bacteriology, pathology, and pharmacology because payment of full-time clinicians was beyond its means.<sup>34</sup>

Individuals outside of Howard ineffectively attempted to convince the GEB to reconsider Howard's case. Cornelius Patton, the son of a former Howard President, wrote the GEB to endorse aid for the Medical Department. Patton said the time had arrived for Howard to have full-time laboratory instructors.<sup>35</sup> Thomas Jesse Jones, a specialist in the Bureau of Education of the Department of the Interior, called attention to the "urgent needs of Howard" after a 1914 visit to the school. Noting that 35 of 38 Howard graduates had passed the state boards in 1914, Jones observed that a school of such high caliber deserved more support.<sup>33</sup> Others decided to contact the GEB after working with Dr. Ernest Everett Just, Howard's eminent black biologist. Just, who taught some classes in the Medical Department, had discussed Howard's predicament while conducting research at Woods Hole, Massachusetts.<sup>36</sup>

Thus, frustration characterized Howard's early relationship with the GEB. The GEB routinely rejected all of Howard's applications, while other more prosperous schools received multimillion dollar grants. Howard continued operation on a shoestring budget, with deteriorating property and equipment. By 1919, Howard's frustrations had peaked. Bartsch, the new Dean of the Medical Department, declared, "Most of us have reached a point of almost complete discouragement, and some of us are questioning whether it would not be well for us to discontinue our efforts completely before degeneration sets in."<sup>2</sup> Fortunately, several pivotal developments occurred in 1919, which improved Howard's fortunes during the next decade.

In October of 1919, the CME reinspected Howard and forwarded its assessment to the GEB. The visit documented all the deficiencies Howard administrators had been describing. Scrupulous enforcement of admission requirements had resulted in debts of \$8,260 in 1918 and \$5,925 in 1919, debts that the University had covered. The medical, dental, and pharmacy schools shared an "old rattle-trap" building that would have been inadequate even if occupied by the Medical Department exclusively. The building had been "repaired to the extreme, iron braces having been inserted here and there

to prevent it from falling to pieces.” The laboratories were “seriously cramped.” Both the library and the museum needed more space and funds. At least three full-time professors, two assistant professors, and two instructors were needed to satisfy minimum full-time instructor recommendations. Instruction had remained “surprisingly excellent” despite the financial difficulties. To rectify the problems, the inspectors recommended a generous endowment; a new building solely for the Medical Department; additional space and funds for the laboratories, library, and museum; funds for expansion of the full-time laboratory faculty; additional equipment and assistants to enable more research by the faculty; a permanent relationship between Freedmen’s and the school; and curriculum adjustments. They concluded that Howard would lose its class A rating without these improvements and advised a “vigorous campaign . . . for the strengthening of this school.”<sup>37</sup> The GEB sent an official to Howard in December of 1919 to review the findings, and he concluded that at least \$500,000 was needed to endow the school.<sup>38</sup>

Another development in 1919 that changed Howard’s prospects for support was a pledge by John D. Rockefeller, Sr., to donate \$45 million to the GEB over the next three years, specifically for support of US medical education. According to Raymond Fosdick, a GEB Trustee from 1922 to 1948, the gift infused the members with new enthusiasm because it enabled expansion of the scope of its programs to include more institutions.<sup>18</sup>

The GEB also decided to abandon its emphasis on installation of full-time clinical instructors the same year. Outsiders had already begun to question the merits of the policy; Pritchett of the CFAT had criticized the rigid contracts the GEB made with schools for the allocation of funds. He felt the deals potentially could have provoked public criticism of the foundations.<sup>39</sup> The GEB’s 1919-1920 annual report explained the revision of policy. Although the GEB still favored the full-time plan, it believed universal deployment would have been a “serious mistake” at that juncture. Implementation was extraordinarily expensive, and the benefits did not necessarily justify neglect of the other vital components of medical education, such as adequately equipped and staffed laboratories and modern, university-affiliated hospitals. The GEB thus resolved thereafter to finance “progressive intention wherever found.”<sup>18</sup>

When Howard submitted the next application in late January of 1920, it encountered a more receptive environment at the GEB. The application echoed earlier attempts—the school was struggling financially and needed an endowment for full-time preclinical instruc-

tors. Instead of a terse rejection, the GEB asked Howard to furnish a statement describing its proposed use of an additional \$25,000 per year. Howard consequently presented a plan to establish full-time positions in several preclinical areas.<sup>40</sup>

Within a month, the GEB resolved to grant conditionally to Howard \$250,000 toward a \$500,000 endowment. The endowment was intended for salaries of full-time professors and assistants in the basic sciences, but not for supplementation of part-time instructors’ salaries. Howard would receive the sum after raising the remaining \$250,000. The GEB allowed Howard until July 1, 1925, to collect its portion and guaranteed 5% interest payments on the grant in the interim.<sup>41</sup>

Howard administrators soon learned that meeting the grant’s conditions presented new challenges. First, Howard had difficulty satisfying GEB stipulations concerning use of the donation. After reviewing a proposed budget, Flexner replied that Howard’s utilization did not concur with the guidelines of the grant.<sup>42</sup> One year later, Flexner criticized Howard’s distribution of salaries. He maintained that Howard had allocated excess money to overhead costs and insufficient funds toward full-time instruction and questioned whether the pattern entitled Howard to the interest payments on the grant.<sup>43</sup>

Raising the money to match the GEB’s grant, however, became the primary obstacle. Howard discovered that it lacked the resources capable of duplicating the sum. The impecunious black community could not easily generate such an amount. The school struggled to attract the attention of white philanthropists. Four short months after the award, Howard President Durkee confided to the GEB that the school was making “desperate efforts” to equal the sum.<sup>44</sup> One year later, Howard had gathered multiple pledges, but had only collected \$101. The next year, donors contributed \$6,490 more. By May of 1922, Howard conceded it would not garner the \$250,000 in pledges required before the July 1 deadline less than two months away. Noting that the school was using its “best endeavors,” Durkee applied for an extension.<sup>45</sup> The GEB extended the deadline to secure pledges until July 1, 1923, and moved the deadline for collection of the subscriptions to July 1, 1926.<sup>46</sup>

Howard administrators moved to concentrate solely on aggressive solicitation of funds. They cancelled an earlier application to the GEB for \$600,000 to supplement professors’ salaries.<sup>47</sup> In September, the Secretary-Treasurer of the University, Emmett J. Scott, MD, distributed a letter asking for financial support. Scott said that as the only class A medical school for black stu-

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dents, it was imperative to "ease the strain that threatens the life of this medical school." He included a descriptive summary of Howard which, not surprisingly, included numerous excerpts from the Flexner Report.<sup>48</sup>

The efforts yielded success. One year after receiving the extension, Howard had gathered 2,417 pledges amounting to almost \$270,000.<sup>49</sup> Over the same year, Howard collected almost \$30,000 from 885 donors. The gifts ranged from ten cents to \$1,000. One hundred fifty-one donors gave less than a dollar, which reflects the limited assets of many of the benefactors.<sup>50</sup>

Completing the pledges did not assuage the financial concerns. In 1925, the federal government donated \$370,000 for a new medical building, provided Howard raised the \$130,000 necessary to equip the facility. Howard had to raise the sum at a time when its undivided efforts had collected only about \$100,000 toward the GEB grant. President Durkee returned to the GEB for help. He requested and received \$80,000 toward the government requirement.<sup>51</sup> Mordecai Johnson, Durkee's successor and Howard's first black President, inherited all the debts when he took office in 1926. Johnson received an extension to December 31, 1927, to collect the pledges, but necessity forced him to approach the GEB again.<sup>52</sup> By June of 1927, the money for construction of the medical school building was almost exhausted. Howard needed the final \$50,000, but the GEB's stipulations had still not been met. Johnson turned to the GEB and requested \$50,000. The GEB approved the application, thus contributing the total \$130,000 required to meet the government's conditional donation.<sup>53</sup>

Under Johnson, Howard enjoyed an improved relationship with the GEB during the final years of the Flexner Era. Howard wanted to establish a program that would promote retention of its brightest graduates. The GEB provided \$75,000 for postgraduate training of persons designated to become future members of the faculty.<sup>54</sup> To improve the salary of the Dean of the Medical Department, the GEB gave \$7,000 for one year and later committed to \$8,000 annually for the next four years.<sup>55</sup> After years of neglect, the Medical Department's library finally received attention. At Johnson's request, the GEB granted \$5,000 for a specialist to evaluate and amend the situation.<sup>56</sup>

Throughout their contact with the GEB, Howard administrators maintained a unique relationship with Flexner. During the frustrating initial years, Howard regarded Flexner as an advisor and confidant. Attempting to secure a grant, the school even offered to pay for

him to inspect the institution and document its difficulties.<sup>32,57</sup> Howard gave Flexner credit for the GEB's largesse in later years. After Howard finally received a GEB grant in 1920, McNeill told Flexner, "For the past eight years, your counsel and encouragement have enabled us to hold on to our purpose against almost overwhelming odds. Time after time when things looked darkest, the knowledge that you would do all you could for us was sufficient to revive our hopes for another struggle."<sup>58</sup>

The Medical Department's 1925 application for \$80,000 provides another example. Flexner, who presented medical school applications before the GEB, incorrectly believed that the application had been submitted by the University. He transferred the application to Halden Thorkelson, who reviewed proposals from universities.<sup>59</sup> Unfamiliar with Thorkelson, Durkee expressed concern. He explained, "I would prefer to withdraw such a request rather than have it go before the Board without a backing that would give it the most hearty and appreciative consideration. I don't want the GEB to turn down a request from Howard University, I would rather not make one at all."<sup>60</sup> Flexner corrected the error and promised to prevent any embarrassment for Howard when he presented the proposal before the Board.<sup>61</sup> The application passed.

Flexner solicited aid for Howard from other sources. In 1927, the Julius Rosenwald Fund asked Flexner whether he felt any institutions deserved special attention. Flexner suggested Howard and Meharry.<sup>62</sup> Howard received a grant of almost \$23,000 for its endowment fund later that year.

Howard's experience with the GEB also catalyzed large-scale fund-raising from private sources. Table 4 summarizes the unprecedented changes that occurred during the Flexner Era. Before 1921, the medical school endowment fund had no contributors. The struggle to meet the GEB's conditional grants attracted thousands of new supporters to the Medical Department. In 1927, Howard collected donations for the fund from over 1,600 benefactors. The drive to meet the conditional grants dwarfed fund-raising for other purposes. After 1921, medical school donations constituted the majority of all private donations. Gifts to the endowment fund accounted for 93% of total donations in 1927 and 91% in 1928. Except for two years, private donations to the University did not exceed \$10,000 before 1921. Total private donations soared the next few years to almost \$160,000, primarily due to efforts for the Medical Department. A large percentage of Howard's gifts came

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TABLE 4. PRIVATE DONATIONS TO HOWARD UNIVERSITY 1910-1929\*

Year	Total	Medical School Endowment Fund	No. Donors to Medical School	Medical School Donations as Percentage of Total Donations
1910	50,368.81	0.00	0	0
1911	2,766.50	0.00	0	0
1912	3,419.02	0.00	0	0
1913	7,253.26	0.00	0	0
1914	20,753.27	0.00	0	0
1915	9,135.23	0.00	0	0
1916	3,410.41	0.00	0	0
1917	3,279.21	0.00	0	0
1918	4,724.99	0.00	0	0
1919	5,103.00	0.00	0	0
1920	4,182.70	0.00	0	0
1921	19,489.43	101.00	NA	0
1922	26,373.35	6,490.00	92	25
1923	55,316.95	29,221.03	885	53
1924	95,304.32†	78,630.10†	484	83
1925	41,934.79	21,109.25	202	50
1926	115,544.01‡	95,545.06‡	675	83
1927	159,565.16**	147,739.29**	1,653	93
1928	107,102.04††	97,244.32††	85	91
1929	54,796.61	168.00	6	0

\* Donations in dollars.

† Includes \$50,762.79 from the General Education Board (GEB).

‡ Includes \$29,796.04 from the GEB.

\*\* Includes \$55,837.89 from the GEB and \$22,843.00 from the Julius Rosenwald Fund.

†† Includes \$78,876.24 from the GEB.

From the *Howard University Financial Report*, Washington, DC, Howard University, years 1910-1918 and 1922-1929; and *Report of the President of Howard University to the Secretary of the Interior*, Washington, DC, Howard University, years 1919-1921.

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from the black community, a fact Howard felt deserved recognition. At the dedication of the new medical school building in 1928, a bronze tablet was dedicated to the fifty-six black men and women who had donated \$1,000 to \$10,000 each. Black donors had contributed over \$170,000 to the fund.<sup>63</sup>

A significant development during the Flexner Era was Howard's increased responsibility for the training of black physicians. When the Flexner Report was published in 1910, seven medical schools educated primarily black physicians. Flexner asserted that only two—Howard and Meharry—merited survival. Financially unsound and unable to attract support, the other five had vanished by 1923.<sup>64</sup> The vast majority of medical schools excluded black applicants, so Howard and Meharry necessarily bore the burden of supplying nearly all the black physicians for the nation. This responsibility persisted long beyond the Flexner Era. Of the 350 black students enrolled nationwide during the 1938-1939

session, 122 attended Howard. During the 1955-1956 school year, Howard claimed 278 of the 761 black medical students in America.<sup>65</sup>

The importance of Howard's role related to the pervasive shortage of black physicians. Inadequate physician output was integral to the perpetuation of the poor conditions described as the "Negro Medical Ghetto."<sup>64</sup> The "distinct mission" of training black physicians, which Flexner assigned to Howard, undoubtedly contributed to the problem. Most white physicians refused to treat black patients.<sup>16</sup> Two schools simply could not supply enough black physicians to provide adequate care for the black community. One cannot blame Flexner alone; his views were probably common in segregated American society. After receiving such extensive publicity and acceptance, however, the Flexner Report helped engrain a misconception, which lingered for decades. W. Montague Cobb, MD, PhD, an eminent physician and historian, argued almost 40 years later, "It has been a common mistake, even among Negroes, to

regard Howard and Meharry as justifying their existence only by being responsible for training nearly all the physicians needed by the Negro group. Their justification is the training of first class physicians, a priority of competence, not race . . . The present indication is for Howard and Meharry to open their doors to more white students, and for the other schools to admit such qualified Negro applicants as might appear."<sup>66</sup>

With the decline of options for black medical students, Howard also assumed a more prominent role in postgraduate education. By the end of the Flexner Era, black graduates had few choices. Rarely could black interns treat white patients, so the opportunities offered at Freedmen's accrued importance. An AMA study revealed that in 1927, 71 of the 119 black graduates proceeded to internships. Fourteen hospitals accommodated the interns, but Freedmen's carried 24—33% of the burden. The 24 actually exceeded Freedmen's needs, but the hospital was trying to provide training otherwise unavailable.<sup>67</sup> Nationally, the number of open internship positions outnumbered applicants by 1,400 to 1,600, when there was a concomitant shortage of jobs for black graduates.<sup>68</sup> In postgraduate medical education for blacks, analysts considered Freedmen's the "most important hospital."<sup>69</sup>

By the end of the Flexner Era, Howard's Medical Department had advanced substantially. A GEB official surveyed the school in November of 1928, and the assessment differed greatly from Flexner's findings in 1910. The school's endowment had surpassed \$520,000. The "splendid" medical school building contained laboratories that were "ample and luxurious in comparison to those previously available." Freedmen's had maintained its exemplary reputation. Some areas still needed improvement. Higher salaries for instructors, more full-time faculty members, a better library, and greater participation in research were cited as deficiencies.<sup>70</sup> Howard had not achieved perfection, but it had kept abreast of many of the fundamental aspects and trends of the reform movement, even after years of neglect.

After dire circumstances early in the Flexner Era, Howard rebounded with resilience. Elevation of admission requirements had halved enrollment, but the census gradually recuperated to transcend prereform levels by the end of the Flexner era. Howard still demanded two years of college work, but attracting qualified students no longer posed a difficulty. In 1928, 165 of Howard's 235 students had earned college degrees, and another 24 had completed three years of college study.<sup>63</sup> Rising enrollment assisted financial recovery; income from fees doubled during the period. More importantly, as Table 2

demonstrates, Howard grew less dependent on tuition as a source of income. In 1929, the percentage of total income derived from fees had dropped to 58%, from over 80% ten years earlier. Howard was indebted to the GEB for this achievement, but the school's ability to gather support from the black community cannot be belittled.

Philanthropic support abetted Howard's progress in the 1920s, as its absence had hindered advancement in earlier years. The GEB commanded the ascent of several schools and established them at the forefront of medical education. Howard progressed, but like most other schools, it was left in the wake of the favored schools propelled to prominence by enormous grants. Flexner had argued that Howard deserved increased support, so its exclusion from the GEB's select cohort after his endorsement merits closer examination.

During the early years, some of the GEB's neglect of Howard may have been due to fear of criticism from racists. The foundation was very sensitive to criticism and took multiple precautions to eschew controversy. Many whites, especially in the South, frowned upon GEB initiatives which benefited blacks. In 1914, southern congressmen even passed legislation restricting the GEB's practices.<sup>39</sup> This climate may have discouraged GEB action initially.

The GEB's preference for the full-time plan also played a factor. As discussed earlier, financial constraints prevented Howard from employing full-time clinicians. Wealthier schools in the favored group landed large grants when Howard could not meet the stringent criteria for aid. Even if Howard had been able to afford the change, it probably would not have secured multimillion dollar grants. Relaxation of the restrictions failed to stimulate grants of this magnitude. Also, evidence suggests that the GEB specifically targeted particular schools under the pretense of impartiality.<sup>39</sup>

GEB Trustee Raymond Fosdick provided another explanation. He argued that Howard's primary affiliation was with the government. Therefore, the government bore the responsibility for providing such a large contribution. The GEB grants Howard received, Fosdick reasoned, were intended to stimulate Congress' conscience.<sup>18</sup> Circumstances had trapped Howard again. The GEB, a source capable of providing a sizeable grant, delegated responsibility to the government. The government, however, failed to respond despite relentless appeals. In addition, federal support on a large scale would have required sufficient support from a bipartisan Congress.

The most convincing explanation involves a

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dichotomy that the Flexner Report created. Flexner justified Howard's permanence by virtue of its potential to produce black physicians who could return to rural areas and battle infectious diseases. Financial support for Howard was therefore intended to redirect its priorities to a more vocational medical education. The refocusing of medical education toward scientific medicine and research, which required millions of dollars of support, no longer applied to Howard. White philanthropists and the CME generally believed that prestigious white schools needed large-scale funding before black schools.<sup>4</sup> Flexner shared this view. Flexner called the application, which compared Howard to Harvard and Johns Hopkins, "presumptuous." He explained to Dr. McNeill, "Harvard and Hopkins are institutions of a very different type from anything Howard could at this moment endeavor to be . . . You have at Howard your own problems and you ought, in a modest way, to work out your own solution to them."<sup>71</sup>

Somehow Howard had to keep pace with the reform movement while maintaining its standards of excellence. The "mission" Flexner described was incompatible with this ideal. Unfortunately, the Flexner Report's widespread acceptance forced Howard to solicit funds using a strategy that circumvented its ultimate goals. Howard repeatedly reminded benefactors of its importance as a producer of sanitarians. The threat of disease gave white philanthropists incentive to donate, but not grants of the magnitude Howard needed. A 1912 application to the GEB illustrates the paradox. Howard repeated the ideals of its founders, that its aim was to offer black students a medical education "equal to that offered by the best colleges in the country." On the other hand, the school was necessary to train "leaders and counselors" for the eradication of the "great problems of sanitation"<sup>72</sup> and to promote preventive medicine. Similarly, the use of quotations from the Flexner Report in applications was a common practice because it lent the arguments objective credibility. The same excerpts also helped defeat Howard's cause.

Thus, multiple factors prevented Howard from securing a multimillion dollar grant, but one must keep the events in proper perspective. One may argue that the majority of medical schools were denied philanthropic support during this period. Indeed, of the \$90.5 million the GEB contributed through 1936, seven schools received over \$64 million. Only 24 schools enjoyed any of the GEB's largesse, so Howard belonged to the fortunate minority.<sup>73</sup>

On the other hand, Howard was virtually omitted

from an exceptional opportunity to ascend to the forefront of American medical education. The inherent racism in the attitudes of Flexner and other philanthropists toward Howard precluded substantive grants. The "distinct mission" Flexner assigned Howard, the recommendation to specialize in hygiene and preventive medicine, and the dismissal of the comparison to Harvard and Johns Hopkins as "presumptuous" demonstrate that Flexner felt that Howard and other black schools were inferior. This attitude encouraged philanthropists to neglect Howard when they divvied up their grants. Although Howard gained a small endowment, glaring deficiencies persist today. It still depends on substantial federal support. As Howard approaches its 125th anniversary, a single endowed chair exists in the *entire* medical school. Howard has not abandoned the ideals of its founders, but it still combats daily the racist dogma propagated during the Flexner era.

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